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File: USPT

Mar 11, 2003

US-PAT-NO: 6531455

DOCUMENT-IDENTIFIER: US 6531455 B1.

TITLE: Delivery of polynucleotides by secretory gland expression

DATE-ISSUED: March 11, 2003

INVENTOR-INFORMATION:

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US-CL-CURRENT: 514/44; 435/320.1

CLAIMS:

What is claimed is:

1. A method of delivering a protein to the bloodstream of a mammal, the method comprising the step of: introducing a formulation comprising a naked DNA construct into a liver cell in vivo, wherein said formulation does not contain a viral particle, bacterial cell, liposome, or cationic compound that facilitates delivery of the construct into the cytoplasm of the liver cell, said introducing being into a lumen of a duct of the liver, wherein the DNA construct comprises a DNA sequence of interest which encodes a protein and a eukaryotic promoting sequence operably linked to the DNA sequence of interest, and wherein the introduced DNA construct is transcribed and the protein encoded by the introduced DNA construct is delivered into the bloodstream of the mammal.

2. The method of claim 1, wherein the mammal is a human and the protein is a human protein.

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